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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/035,364   | 12/28/2001  | Benjamin N. Eldridge | P170-US             | 2061             |
| 27520  | 7590        | 07/30/2003           |                     |                  |
| FORMFACTOR, INC.<br>LEGAL DEPARTMENT<br>2140 RESEARCH DRIVE<br>LIVERMORE, CA 94550 |             |                      | EXAMINER            |                  |
|  |             |                      | NGUYEN, JIMMY       |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 2829                |                  |

DATE MAILED: 07/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s)    |
|-----------------------|-----------------|-----------------|
|                       | 10/035,364      | ELDRIDGE ET AL. |
| Examiner              | Art Unit        |                 |
| Jimmy Nguyen          | 2829            |                 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

1. SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM

A SHORTENED STATUTORY PERIOD FOR REPLY  
THE MAILING DATE OF THIS COMMUNICATION.

THE MAILING DATE OF THIS COMMUNICATION. It may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed

- Extensions of time may be available under the provisions of 37 CFR 1.100(d). If no such extension is filed, the period for reply will be considered timely after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 12/28/01.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-21 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) 1-21 is/are allowed.

6)  Claim(s) \_\_\_\_\_ is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)  The proposed drawing correction filed on \_\_\_\_\_ is: a)  approved b)  disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)  The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.  
14)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a)  The translation of the foreign language provisional application has been received.  
15)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)      4)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)      5)  Notice of Informal Patent Application (PTO-152)  
3)  Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.      6)  Other: \_\_\_\_\_

**DETAILED ACTION**

1. This application is in condition for allowance except for the following formal matters:

Figure 1 should label as the prior art.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

***Allowable Subject Matter***

2. Claims 1 – 9, 20 and 21 are allowed.

The prior arts of record disclosed the semiconductor wafer system comprising a stage for moving wafer into and out of contact with a plurality of probes. However the prior arts or record are fail to disclose the combination of the above limitation with the method and the apparatus for testing semiconductor device by monitoring a voltage on a power source to one probes; and if voltage exceeds a predetermined threshold during a move of stage, signaling an arc condition.

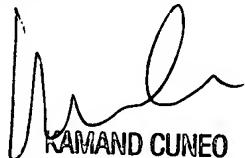
3. Claims 10 –19 are allowed.

The prior arts of record are fail to disclose the structure of the device which is detecting an arc including a comparator having an input connected to a reference voltage and another input connected to a power source to a test probe for contacting a

semiconductor wafer; a latch having an input connected to an output of said comparator; enabling means for enabling said latch only in connection with a move of said wafer with respect to said probe; and signaling means for signaling an arc condition if said output of said latch indicates that said output of said comparator was triggered while said latch is enabled.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy Nguyen at (703) 306-5858. Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4900.



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JN.  
July 15, 2003